

Partial Translation of Reference 2

Jpn. Pat. Appln. KOKAI Publication No. 11-298959

Filing No.: 10-97072

Filing Date: April 9, 1998

Applicant: Nihon Denki Tsushin Shisutemu Kabushiki Kaisha (Transliterated)

Priority: Not Claimed

KOKAI Date: October 29, 1999

Request for Examination: Filed

Int.Cl.: H04Q 7/38

7/34

---

Line 16 of Column 12 to Line 1 of Column 14

[0041] The update transmission sequence of the present invention will now be described. FIG. 7 is a diagram illustrating the update transmission sequence according to an embodiment. Referring to FIGS. 1-7, the portable telephone 11 executes a location registration sequence between the radio base station 12 and the mobile communication control station 13 and then the operation portion 49 is operated for "on hook" ((1) in FIG. 7), thereby making a call. The "on hook" signal S1 is transmitted to the mobile communication control station 13 through the radio base station 12. The radio base station 12 receives the call from the portable telephone 11, processes it by means of the transmission/receiving section 21, modulation/demodulation unit 22 and

multiplexing unit 23, and sends the processed call to the mobile communication control section 13. The mobile communication control section 13 detects the call by means of the multiplexing unit 31, voice processing unit 32, mobile communication exchange 33 and control unit 34. In addition, the radio base station 12 transmits a dial tone signal (DTMF signal, S2) to the portable telephone 11 ((2) and (3) in FIG. 7).

[0042] A specific telephone number (or a special character or number) S3 used for executing the update transmission sequence is entered from the operation portion 49 of the portable telephone 11, and is transmitted to the radio base station 12 by radio ((4) in FIG. 7). The specific telephone number is transmitted from the radio base station 12 to the mobile communication control station 13, and further to the server 14 by way of the communication control section 35. In the server 14, the specific telephone number is sent to the request reception control section 61 by way of the communication control section 60. The request reception control section 61 translates the specific telephone number and determines whether or not the provision of the service information required for the update transmission sequence is allowed. In other words, the request reception control section 60 determines whether or not the recipient is entitled to receive the service information ((5) in FIG. 7)

[0043] Where the determination indicates that the specific telephone number corresponds to the recipient who is allowed to receive the service information, the voice guide of the terminal information request that requests the transmission of terminal information is read out from the guidance transmission section 63 under the control of the request reception control section 61. The voice guide is stored in the terminal specific data section 271 and the expanded data section 272 of the add-in memory 51 (FIG. 6(b)) of the portable

telephone 11 (or the expanded data section 281 of the of the add-in memory 52 shown in FIG. 6(c)). The terminal information acquiring request S4 is transmitted to the portable telephone 11 by way of the mobile communication control station 13 and the radio base station 12 ((6) of FIG 7). The portable telephone 11 checks the information stored (or installed) in the add-in memory 51 ((7) of FIG. 7), and then transmits a terminal information acquiring response S5 to the server 14 by way of the radio base station 12 and the mobile communication control section 13.

[0044] In the server 14, the request reception control section 61 analyzes the terminal information acquiring response S5, namely, the information regarding the terminal specific data section 271 and the expanded data section 272 shown in FIG. 6(b) (the information being stored in the add-in memory 51). Then, the control program of the service information provided to the portable telephone 11 and the service data are changed, and the voice guide indicating the update is read out from the guidance transmission section 63 under the control of the request reception control section 61. The voice guide S6 is sent to the portable telephone 11 through the mobile communication control station 13 and the radio base station 12. In addition, the service information stored in the service data storage section 62 is read out under the control of the request reception control section 61, and the voice guide S6 of this information is transmitted to the portable telephone 11 by way of the mobile communication control station 13 and the radio base station 12. In this manner, the voice guide is provided to the user. ((8) in FIG. 7)

[0045] The user of the portable telephone 11 listens to the voice guide S6 and selects a desired new control program and service data by operating the operation portion 49. The service number S7 is thus transmitted to the radio

base station 12 ((9) in FIG. 7). By way of the radio base station 12 and the mobile communication control section 13, the service number S7 is transmitted to the server 14. In the server 14, the request reception control section 61 checks the service number S7 ((10) in FIG. 7), reads out the control program and the service data of the service information corresponding to the service number S7 from the service data storage section 62. The download information is sent to the portable telephone 11 by way of the mobile communication control station 13 and the radio base station 12.

[0046] In the portable telephone 11, the new service information provided by the server 14 is written in the add-in memory 51 under the control of the controller 47 ((11) in FIG. 7). If it is determined beforehand that the service information is to be installed in the add-in memory 52, the add-in memory 52 stores the new control program and service data provided by the server 14.

[0047] After the new service information, namely the control program and the service data, is incorporated, the portable telephone 11 sends a download termination notification S9 to the server 14 by way of the radio base station 12 and the mobile communication control station 13, thereby ending the execution of the update transmission sequence ((12) in FIG. 7). Then, the operation portion 49 of the portable telephone 11 is operated for the termination of communications ("on hook") ((13) in FIG. 7). The mobile communication control station 13, which receives the communication termination signal S10 through the radio base station 12, detects the termination of the communication, and the communication route is restored ((14) in FIG. 7).